The Rip Tide

The Bi-monthly E-newsletter of the New Hampshire Coastal Program **March 2005**

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■ (603) 559-1500 ■ www.des.nh.gov/coastal ■

NEWS

NHCP To Help Designate Disposal Site

NHCP begins talks on the impending closure of the Cape Arundel ocean dredged material site.

Innovative Technique Tracks Pollution Sources

NHCP and Watershed Assistance identify pollution sources in Great Bay using a high-tech approach.

NHCP Grant Funds Marine Education

NHCP grant to the Blue Ocean Society provides interactive programming at eligible schools.

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NHCP Welcomes New Employee Chris Williams

NHCP Announces Principal Planner Job Opening

NHCP Requests Proposals for Restoration Grants

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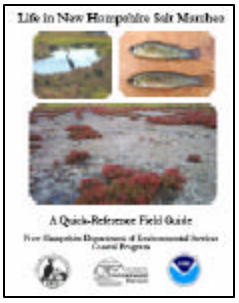

2005 Tide Calendar, NHCP

Life in N.H. Salt Marshes: A Quick Reference Field Guide, NHCP

Gulf of Maine Habitat Primer, Gulf of Maine Council

Gulf of Maine Habitat Restoration Strategy, Gulf of Maine Council

New Hampshire Audubon, Winter 2005, N.H. Audubon Society

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Earth Day 2005: A Day of Stewardship

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NEWS

NHCP To Help Designate Disposal Site

The Cape Arundel Disposal Site (CADS), located off the coast of Maine, will close in January 2010, ending New Hampshire's and Maine's ability to take dredged material to the site. In February, the Dredge Management Task Force, chaired by NHCP, began discussions with the Environmental Protection Agency (EPA) on the two to three year process to find an alternate site.

The Dredge Management Task Force gives advisement on dredging projects in New Hampshire. Participants include the U.S. Army Corps of Engineers, New Hampshire Department of Transportation, New Hampshire Ports and Harbors Division, local organizations and community members.

Map of Cape Arundel, Maine
Courtesy of the U.S. Army Corps of Engineers Website

The closure of CADS will end the ability of federal and state projects in New Hampshire and Maine to dispose of dredged material. The closure will also impact private dredging projects.

"The need drives the process [of finding a new site]," said Olga Guza, Environmental Scientist, EPA Region I.

CADS and other ocean disposal sites that have not been designated by the EPA are considered interim sites under the Marine Protection, Research and Sanctuaries Act (MPRSA). MPRSA limits the term of permits at interim locations. At CADS, the five year time clock started ticking as of January 11, 2005, when disposal of dredged material from the Kennebunk River began.

The EPA will officially designate a new site after going through an extensive environmental assessment in cooperation with the U.S. Army Corps of Engineers, NHCP and the state of Maine. An environmental impact statement will describe the purpose and need of the project and include scoping and evaluating alternate locations. NHCP will play an advisory role.

Funding must be appropriated from Congress to begin the initial scoping phase. NHCP and the state of Maine will make written requests to their congressional delegates to allocate funds during the next budget cycle. Funds would be received in October 2005.

During the scoping phase, EPA will take input from all stakeholders on the best alternate locations, including input from members of the marine trades industries and fishing, lobster and shellfishing communities.

"The scoping phase determines how alternative sites will be assessed," said Ted Diers, NHCP Program Manager.

Further evaluation of the potential locations includes environmental surveys, review of past and new data, and a long-term assessment of dredging needs in Maine and New Hampshire. Additional funding will need to be appropriated by Congress to complete these studies. The entire process costs between $5 million and $10 million, according to EPA.

The new site will most likely be located in federal waters outside the three-mile state coastal zone limit. Ideal sites have a close proximity to dredging projects and have the least amount of environmental impact.

Innovative Technique Tracks Pollution Sources

University of New Hampshire lab technician conducts a step in the analysis.

Results from a study in the Great Bay Estuary watershed found fecal bacteria from several sources, including cow, dog and human. NHCP and the Watershed Assistance Bureau, both currently part of the Department of Environmental Services (DES), began the project in the spring of 2004, before NHCP was incorporated into DES.

NHCP and the Watershed Assistance Bureau worked with the University of New Hampshire (UNH) to identify bacteria sources. Using a technique called Ribotyping, UNH researchers matched bacteria from water samples to bacteria from specific animals.

"The technology is particularly interesting because it allows potential sources of contamination to be identified. It's exciting to really address source species," said Sally Soule, NHCP Nonpoint Pollution Coordinator.

In 2003, several shellfish sites were closed due to contamination. Sally Soule and Natalie Landry, Coastal Watershed Supervisor in Watershed Assistance, saw a project opportunity.

"A big problem in trying to reduce bacteria pollution is figuring out where the bacteria come from. The larger, more obvious sources are under control, but this technology allows us to pinpoint non-obvious sources," said Landry.

An NHCP grant funded the Ribotyping study. NHCP staff collected samples at nine sites in Great Bay from March-May 2004. The UNH Jackson Estuarine Laboratory provided the analysis. Sites were chosen based on high bacteria levels where there were no obvious pollution sources or multiple potential sources. Sampling locations included Great Bay, Little Bay, the Winnicut River and the Bellamy River.

The most frequent sources of bacterial pollution found were chicken, cow, dog, goose, oxen and human.

How does the technique work? Each animal type has a unique DNA pattern, also known as a ribopattern, which can be thought of as a fingerprint for that animal. Escherichia coli (*E. coli*) bacteria are isolated from known animal sources to create a library of ribopatterns. A machine called a RiboPrinter extracts ribopatterns from bacteria in polluted water samples. These DNA fingerprints are then matched up to an existing library of known animals.

Study results were used to make recommendations that address pollution sources.

"The technology targets problems and helps get them resolved," said Soule.

The first follow-up activity involves working with the city of Dover on reducing pet waste in a neighborhood that borders the Bellamy River. NHCP and Watershed Assistance staff met with a steering committee on February 1 to talk about ways to get the community to shape goals for the project.

Another action is working with the Natural Resource Conservation Service to promote manure management at agricultural operations and stables. Other recommendations include working with septic system owners to fix failing systems and investigating potential leaks at wastewater treatment plants.

NHCP Grant Funds Marine Education

Have you ever had class inside a whale?

NHCP grant money allows the Blue Ocean Society, a nonprofit dedicated to marine conservation, to offer free educational programs to schools in the coastal zone. One program takes place inside a 60-foot inflatable fin whale, an animal that lives in our oceans and is the second largest animal in the world.

Students learn from a life-sized replica of a fin whale.

Presentations teach children about local marine life, including everyday actions they can take to help oceans.

According to Jen Kennedy, staff scientist at the Blue Ocean Society, "The best way to get kids interested in conservation is to show them how cool the animals are, and then explain how to help."

One of Kennedy's most memorable responses during an activity was when a little girl said, "That was the coolest thing I've ever done!" after walking through the inflatable whale.

Another favorite program is the tidal pool. A touch tank contains an assortment of live animals, including sea stars, crabs, and seaweed. A follow-up discussion after this activity is teaching kids about responsible tidepooling, a popular activity on the coast during the summer months.

"We also explain why animals can't live in your bathtub," said Kennedy.

Presentations are on a first come first serve basis. For more information or to view a list of communities within the coastal zone, visit www.blueoceansociety.org/school.htm or call Jen Kennedy at (603) 431-0260.

ANNOUNCEMENTS

NHCP Welcomes New Employee Chris Williams

In February, Chris Williams became NHCP's new federal consistency coordinator. Chris will make sure federal projects in the coastal zone meet NHCP policies. Chris comes to NHCP after five years with the DES Wetlands Bureau Inland Permitting Section, which included a three and a half year position as permitting supervisor. His other job experiences involved roles in technical and regulatory wetland issues with the Virginia Department of Environmental Quality and the EPA. Chris holds a master's degree in oceanography from Old Dominion University in Virginia.

NHCP Announces Principal Planner Job Opening

NHCP has an immediate opening for full-time principal planner. This position is based at the Pease Field Office in Portsmouth.

The principal planner administers the Coastal Enhancement Grant Program, including the identification and implementation of policy and program changes to improve the program, the development of long range plans and budgets, and grant administration. The Coastal Enhancement Grant Program focuses on coastal habitat restoration, wetland policy and land-use issues.

The successful candidate will have broad environmental experience, especially in the areas of wetlands and cumulative and secondary impacts of development. Skills and knowledge of both science and policy is a must. The candidate should also be an excellent communicator, facilitator and self-starter. Habitat restoration experience is a plus. This position requires a structured oral interview.

Minimum qualifications are: a master's degree from a recognized college or university with major study in planning, with three years experience in professional planning; or, a master's degree from a recognized college or university with major study in a planning related field such as economics, geography, government, public administration, resources management, community development, environmental science, or environmental law and four years experience in professional planning or experience in a related field as specified above; or, a bachelor's degree from a recognized college or university with major study in planning, economics, geography, government, resources management, community development or natural resources planning, environmental science, or environmental law with five years experience in professional planning or experience in a related field as specified above. License/Certification: Eligibility for New Hampshire driver's license and access to transportation for use in statewide travel. The successful candidate must satisfactorily pass a criminal background and motor vehicle check.

The salary range for this position is $36,036.00 - $42,997.50. Three additional steps may be awarded based on successful performance evaluations. Attractive benefits package.

For further information on position responsibilities contact Ted Diers at (603) 271-7940 or e-mail tdiers@des.state.nh.us.

To download a state application in either PDF or Word format visit http://www.des.state.nh.us/employ.htm, send a request to hr@des.state.nh.us, or call Anne Welch at (603) 271-8875, or for hearing impaired at TDD Access Relay: NH 1-800-735-2964. Please return the completed application along with a copy of your college transcripts to

Dept. of Environmental Services, Human Resources Unit, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095.

NHCP Requests Proposals for Restoration Grants

NHCP has grant funds available for habitat restoration projects in the state's coastal zone. Grants are offered on a continual basis to eligible applicants. There is no match requirement.

Who is Eligible?

Dover, Durham, Exeter, Greenland, Hampton, Hampton Falls, Madbury, New Castle, Newfields, Newington, Newmarket, North Hampton, Portsmouth, Rollinsford, Rye, Seabrook and Stratham are eligible. Nonprofit organizations must be registered as corporations with the N.H. Secretary of State. Visit www.sos.nh.gov/corporate/ to view this list. Rockingham Planning Commission, Strafford Regional Planning Commission, state agencies, departments within the University of New Hampshire (and other institutions of higher education), and coastal community public schools are also eligible.

What Types of Projects Are Funded?

Restoration grants can be used for coastal river (anadromous fish) restoration, eelgrass restoration, invasive/exotic plant management, salt marsh restoration, and other projects as seen fit.

Restoration grants also can be used for activities that support habitat restoration, including biological or water quality monitoring, construction, engineering designs or specifications, feasibility studies, outreach and education, planning, and research.

For additional information on grant requirements, application requirements, selection criteria, and the application form, please contact Ted Diers at (603) 559-0027 or tdiers@des.state.nh.us.

NEW PUBLICATIONS

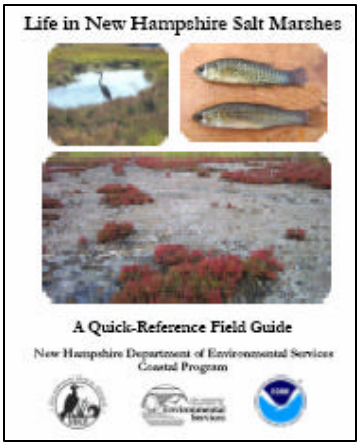
2005 Tide Calendar, NHCP

The calendar tells when to expect high and low tides for each day in 2005 in Portsmouth Harbor and provides adjustments for tides in other seacoast locations.

The calendar also provides information on the monthly lunar cycles. Each month has a coastal scene as the background.

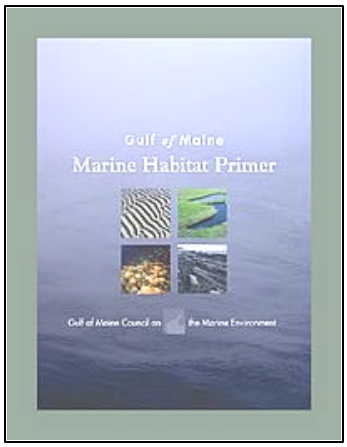
Visit www.des.state.nh.us/Coastal/pdf/Tide_Chart.pdf to download a copy.

Life in New Hampshire Salt Marshes: A Quick Reference Field Guide, 2005 Edition, NHCP



Is that a grass or a sedge? What kind of crab is that? The field guide provides descriptions, photos and drawings of common salt marsh species. This revised edition includes new pictures and illustrations, additional plant species, and an overhaul of the fish/nekton section.

Visit www.des.nh.gov/Coastal/Resources/SaltmarshPlantFieldGuide.pdf to download a copy.

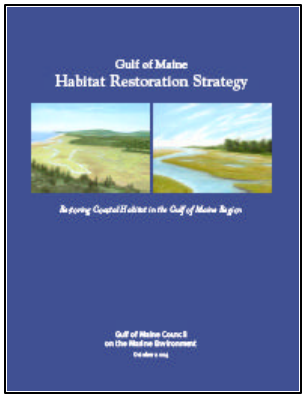


Gulf of Maine Habitat Primer, February 2005, Gulf of Maine Council on the Marine Environment

The primer gives an overview of coastal and offshore habitat types in the Gulf of Maine through text, photos and graphics. It also discusses human impacts and management strategies in each habitat type. The primer is a tool for decision makers in the coast, like planners, legislators, conservation commissioners and nonprofit staff members.

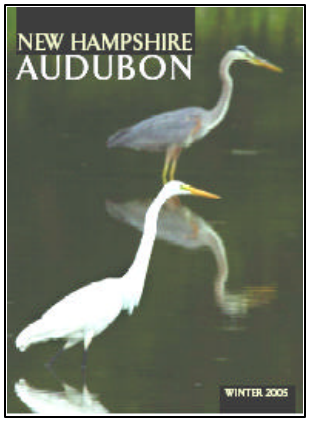
Visit www.gulfofmaine.org/habitatprimer to download a copy or e-mail ccoletti@des.state.nh.us to request a printed copy.

Gulf of Maine Habitat Restoration Strategy, October 2004, Gulf of Maine Council on the Marine Environment



This report identifies threats and opportunities for habitat restoration in the Gulf of Maine. Locations for potential projects are also described. The report emphasizes the importance of taking a regional approach to restoration.

Visit www.gulfofmaine.org/habitatrestoration/documents/HabitatRestorationStrategyFinal.pdf to download a copy.



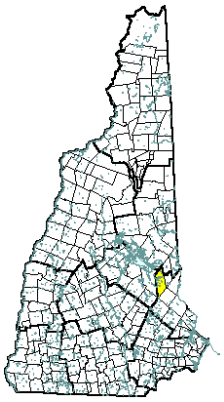
New Hampshire Audubon, Winter 2005, New Hampshire Audubon Society

This issue of the New Hampshire Audubon Society's magazine is dedicated to salt marsh conservation and ecology.

Visit www.des.state.nh.us/Coastal/Resources/NHAMag_Win05.pdf to download a copy. No portion of this publication may be reproduced without written permission from New Hampshire Audubon.

CALENDAR OF EVENTS

Dealing With Growth in New Durham Presentation



Date: Tuesday April 19, 2005

Time: 7:00 p.m.

Location: New Durham Elementary School

Sponsored By: Natural Resources Outreach Coalition (NROC) and the town of New Durham

The UNH cooperative extension and Strafford Regional Planning Commission will give a powerpoint presentation on issues and concerns surrounding growth in New Durham. All are welcome to attend. Contact Amanda Stone at NROC for more information at (603) 364-5324 or amanda.stone@unh.edu.

Earth Day 2005: A Day of Stewardship

Date: Saturday April 23, 2005

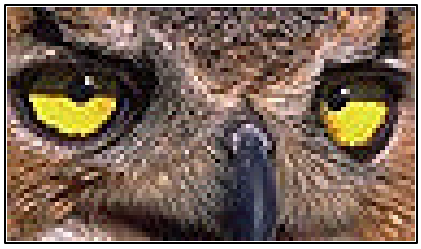
Time: 11:00 a.m. – 4:00 p.m.

Location: Seacoast Science Center, Rye

Sponsored By: Northern Utilities

Celebrate the earth with special projects and events for children of all ages. Stories, crafts, and outdoor projects will help us all to become active earth stewards on a community level. These programs are a fun and enriching way to spend a spring day. Wearing boots or old shoes and bringing work gloves is recommended as some of the programs may involve gardening or beachcombing. For a complete schedule of events, please call (603) 436-8043.

Discover Wild New Hampshire



Date: Saturday April 30, 2005

Time: 10:00 a.m. – 3:00 p.m.

Location: New Hampshire Fish & Game

Sponsored By: New Hampshire Fish & Game

Participate in hands-on activities from archery to arts and crafts. View over 35 exhibits by conservation organizations from across the state, including presentations, live animals and much more. Admission is free.

Visit www.wildlife.state.nh.us for more information.